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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,616	07/31/2002	Yi-Jing Lin	8990-US-PA	6861

31561 7590 12/20/2004

JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE  
7 FLOOR-1, NO. 100  
ROOSEVELT ROAD, SECTION 2  
TAIPEI, 100  
TAIWAN

EXAMINER

ABEBE, DANIEL DEMELASH

ART UNIT	PAPER NUMBER
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2655

DATE MAILED: 12/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

9/3

<b>Office Action Summary</b>	Application No. 10/064,616	Applicant(s) LIN, YI-JING	
	Examiner Daniel D Abebe	Art Unit 2655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.                                                |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Beard et al. (5,857,173).

As to claim 1, Beard teaches a method of labeling a speech with a phonetic symbol for teaching pronunciation, comprising the steps of:

Establishing a pronunciation dictionary or a phoneme based database (21);

Converting a speech input into phoneme (33) by using speech recognition technology, where speech signals samples are divided into frames, converted into feature vectors (30) and the features are converted to phoneme values (35,36); and

Comparing (40) the pronunciation of the phonemes with the phoneme strings contained in the pronunciation dictionary and perform grading in accordance to the result (16; Fig.2; Col.1, lines 60-67)

As to claims 2-5, Beard teaches generating database of speech phoneme, which are speech units representing the means and variance of the features vectors that are obtained from frames of speech samples (Col.3, lines 52-65)

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beard as applied to the claims above, and further in view of Komissarchi et al. (6,397,185).

As to claim 6, Beard doesn't explicitly teach the step of inputting the text and sound as claimed. Komissarchi, however teaches a pronunciation tutoring system, where text and the corresponding sound is provided by the user and where the system compares the input sound and the synthesized sound to compare the pronunciation between the two sounds (Figs.5b, 8-10). it would have been obvious to modify Beard's art in view of Komissarchi for the purpose of allowing the students to select words they want to practice.

With respect to claims 7-12, Beard teaches where input signal converted into feature vector is labeled with phonemic symbols using the well known viterbi decoder (33).

As to claims 13-14, Komissarchi teaches where the comparison includes pitch/intonation, stress and rhythm (Fig.7).

As to claim 15, Beard teaches graphically displaying the correlation and the duration of the phonemes (Fig.4) however doesn't teach displaying the features as

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claimed. Komissarchi teaches graph indicating the similarity/difference between the pronunciations of the sounds in syllables form, where the graph depicts the pronunciations waveform (Fig.9), intensity (Fig.7) and stress/rhythm (Fig.8). the obvious motivation for combining the two methods is to give the student a better idea of what to improve.

As to claims 16-17, Komissarchi teaches user interface means to select the text (Fig.1).

Claim 18, analogous to claim 15 and is rejected by Beard et al. in view of Komissarchi for the foregoing reasons.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Barnard\* (6,434,521), see Figs.3-4.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel D Abebe whose telephone number is 703-308-5543. The examiner can normally be reached on monday-friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 703-305-4827. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel Abebe Primary Examiner Art Unit

A handwritten signature in black ink, appearing to read 'Daniel Abebe', written in a cursive style.

December 14, 2004